## In the Claims:

Kindly amend the claims as follows:

1. (Previously Presented) A production method of a titanium-made plate-type heat exchanger comprising flow paths of a first fluid and flow paths of a second fluid alternately arranged such that heat can be exchanged between the two fluids, said production method for forming said flow paths by connecting a titanium-made flat container having an inlet of one of the fluids formed on one end and an outlet of the fluid formed on the other end to an offset-type titanium plate fin accommodated in said flat container and connected to the inner side of said container via top ends of concave strips of said titanium plate fin so as to form a plane to plane connection, comprising steps of:

coating a brazing paste over positions to be connected of said constituting members by using a paste supply machine, wherein said brazing paste is prepared by atomizing an alloy comprising a Ti-Zr type brazing solder, which melts under 880°C, containing 20 to 40 wt.% of titanium 20 to 40 wt.% of zirconium, 15 to 25 wt% of copper and 0 to 10 wt% of nickel so as to obtain a powdered alloy, which is mixed with a neutral binder so that said paste is prepared; and

heating said brazing solder coated constituting members under 880°C in an vacuum and/or inert gas atmosphere.

2-11. (Cancelled) Without prejudice.